CLAIMS

1. A polymer composition for encapsulating or carrying a chemical and/or biological agent, comprising either a polyamine or oxirane composition or mixture thereof.

2. A composition as claimed in claim 1, wherein the composition is cationic.

3. A composition as claimed in either claim 1 or 2, wherein the oxirane composition comprises (chloromethyl) oxirane, (bromoethyl) oxirane or a mixture thereof.

4. A composition as claimed in any preceding claim, wherein the composition comprises,

(a) 1,6-hexane diamine N-(6-aminohexyl);

(b) 1H-imidazole chloro methyl oxirane copolymer; and optionally

(c) water.

5. A composition as claimed in any preceding claim, for use as a wrap composition.

6. A composition as claimed in either claim 4 or 5, wherein the 1,6-hexane diamine N-(6-aminohexyl) is mixed with chloromethyl oxirane

7. A composition as claimed in claim 6, wherein the composition comprises the ingredients in the following quantities:

(a) 25-45 % 1,6-hexane diamine N-(6-aminohexyl) with chloromethyl oxirane;

(b) 5-25 % 1H-imidazole chloro methyl oxirane copolymer in water; and

(c) 40-60 % water

8. A composition as claimed in either claim 6 or 7, wherein the chloromethyl oxirane is present as a residual component.

9. A composition as claimed in either claim 7 or 8, wherein the copolymer is present in a solution with water.

10. A composition as claimed in claim 9, wherein the concentration of the copolymer in water is in the range of 30% to 50% in solution.

11. A composition as claimed in any preceding claim, wherein the composition acts as a film to which the agents may be applied.

12. A composition as claimed in any preceding claim, wherein the agent is a non-water soluble compound.

13. A composition as claimed in any of claims 1 to 11, wherein the agent may be selected from one of the following agents: dyes, perfumes, cosmetics, detergents, fragrances, pharmaceutical preparations, pheromones, insect repellents, anti-microbial agents, enzymes and micro-organisms.

14. A composition as claimed in any preceding claim, wherein the agent is up to 50 microns in size.

15. A composition as claimed in any preceding claim, wherein the composition and/or agent further comprises an additive.

16. A composition as claimed in any of claims 1 to 11, wherein the agent is dissolved or dispersed in a solvent.

17. A method of coating or wrapping an encapsulated chemical or biological agent using a composition claimed in any preceding claim, comprising contacting the encapsulated agent with the composition.

18. A method of coating or wrapping as claimed in claim 17, wherein the coating or wrapping is carried out at temperatures in the range of 15 - 40°C at a pH in the range of 5.5 - 7.5.

19. A method of coating or wrapping as claimed in either claim 17 or claim 18, wherein the method is performed using a using a high speed stirrer.

20. A substrate at least partially coated or wrapped with a composition as claimed in any of claims 1 to 11 or produced by the method as claimed in any of claims 17 to 19.

21. A substrate as claimed in claim 20, wherein the substrate is a cellulose and/or protein based material, and/or an encapsulated chemical or biological agent.

22. A method of dyeing fabrics using a composition as claimed in any of claims 1 to 11, wherein the composition is used in conjunction with a dye.

23. A method of dyeing fabrics as claimed in claim 22, wherein additional compounds are used to assist the action of the dye.

24. A method of dyeing fabrics as claimed in claim 23, wherein the additional compounds comprise one or more of the following compounds: salt, soda, wetting agents, leveling agents or dispersing agents.

25. A method of dyeing fabrics as claimed in any of claims 22 to 24, wherein after the application of the dye to the fabric, the fabric is treated with an after treatment.

26. A method of dyeing fabrics as claimed in any of claims 22 to 24, wherein the composition is used to pre-treat the fabric prior to the application of the dye.

27. A method of dyeing fabrics as claimed in any of claims 22 to 26, wherein the composition and/or the agent is applied to a surface by one or more of the following techniques: spraying, printing, padding or exhaustion techniques.

28. A method of dyeing fabrics as claimed in any of claims 22 to 27, wherein the method comprises the steps of:

(a) immersing the fabric in water;

(b) heating the water to a temperature of between 15 - 30°C;

(c) cleaning the fabric so as to remove most contaminants;

(d) adjusting the pH of the liquid to between 8 - 10;

(e) adding the composition to the liquid;

(f) heating the liquid to a temperature of between 40 - 80°C;

(g) draining the liquid and rinsing the fabric;

(h) adjusting the pH of the liquid to between 5 - 8 if necessary;

(i) adding a colourant; and

(j) heating the liquid to a temperature in the range of 50°C-70°C;

(k) optionally, after-treating the fabric; and

(l) draining the liquid from the fabric.

29. A method of dyeing fabrics as claimed in claim 28, wherein step (j) is preceded with the additional step of adding a cellulase enzyme to the liquid.

30. A method of dyeing fabrics as claimed in either claims 28 or 29, wherein the colourant is selected from one or more of the following colourants: reactive dyes, direct dyes, acid dyes and pigments.

31. A method of dyeing fabrics as claimed in any of claims 22 to 30, wherein the method further comprises the addition of a suitable handle modifier.